REMARKS

The Examiner is respectfully requested to enter the present amendments prior to calculating the filing fee on the divisional continuing application referenced above.

In the present Preliminary Amendment, applicants cancel the claims that were prosecuted in the parent case, Serial No. 09/197,358, leaving claims 44-53 pending in the present case, and amend the claims to clarify their scope.

If the Examiner has any questions or comments or otherwise feels it would be helpful, he is encouraged to telephone the undersigned at (713) 238-8043.

Respectfully submitted,

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ATTORNEY FOR APPLICANT

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Marked-up Copy of Claims Showing Changes Made

44. (Amended) A medium-hard to extremely hard formation-type earth boring bit comprising:

a) a bit body having a longitudinal bit axis and a bit diameter;

b) at least one rolling cone cutter rotatably mounted on the bit body and having an offset of its rotational axis from the bit axis of:

4) at least 1/16 inches when the bit diameter is less than 7 inches,

5) at least 3/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or

6) at least 5/32 inches when the bit diameter is at least 12 inches; ~~and~~

c) a journal angle being formed between the rotational axis and the bit axis of at least 36°; and

b) at least one super-abrasive cutter element located on an inner row of the cone cutter.

47. (Amended) The bit of claim 44 wherein the amount of offset is:

a) at least 3/32 inches and less than 1/8 inches when the bit diameter is less than 7 inches,

b) at least 5/32 inches and less than 7/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or ~~and~~

c) at least 7/32 inches and less than 9/32 inches when the bit diameter is at least 12 inches.

48. (Amended) The bit of claim 44 wherein the amount of offset is:

d) at least 1/8 inches when the bit diameter is less than 7 inches,

e) at least 7/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or ~~and~~

f) at least 9/32 inches when the bit diameter is at least 12 inches.

Clean Copy of Pending Claims

44. (Amended) A medium-hard to extremely hard formation-type earth boring bit comprising:

a) a bit body having a longitudinal bit axis and a bit diameter;

b) at least one rolling cone cutter rotatably mounted on the bit body and having an offset of its rotational axis from the bit axis of:

7) at least 1/16 inches when the bit diameter is less than 7 inches,

8) at least 3/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or

9) at least 5/32 inches when the bit diameter is at least 12 inches;

c) a journal angle being formed between the rotational axis and the bit axis of at least 36°; and

c) at least one super-abrasive cutter element located on an inner row of the cone cutter.

45. The bit of claim 44 wherein the super-abrasive cutter element comprises a polycrystalline diamond coated insert.

46. The bit of claim 44 wherein the super-abrasive cutter element comprises a cubic boron nitride coated insert.

47. (Amended) The bit of claim 44 wherein the amount of offset is:

a) at least 3/32 inches and less than 1/8 inches when the bit diameter is less than 7 inches,

b) at least 5/32 inches and less than 7/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or

c) at least 7/32 inches and less than 9/32 inches when the bit diameter is at least 12 inches.

48. (Amended) The bit of claim 44 wherein the amount of offset is:

g) at least 1/8 inches when the bit diameter is less than 7 inches,

h) at least 7/32 inches when the bit diameter is at least 7 inches and less than 12 inches, or

i) at least 9/32 inches when the bit diameter is at least 12 inches.

49. The bit of claim 44 wherein the bit comprises an insert bit having an IADC classification of 6-1-x or higher series number.

50. The bit of claim 44 further comprising a super-abrasive cutter element located on a gage row of the rolling cone cutter.

51. The bit of claim 44 further comprising a super-abrasive cutter element located on a secondary gage row of the rolling cone cutter.

52. The bit of claim 44 further comprising a super-abrasive cutter element located on a heel row of the rolling cone cutter.

53. The bit of claim 44 further comprising super-abrasive cutter elements located on all the inner rows of all the rolling cone cutters.